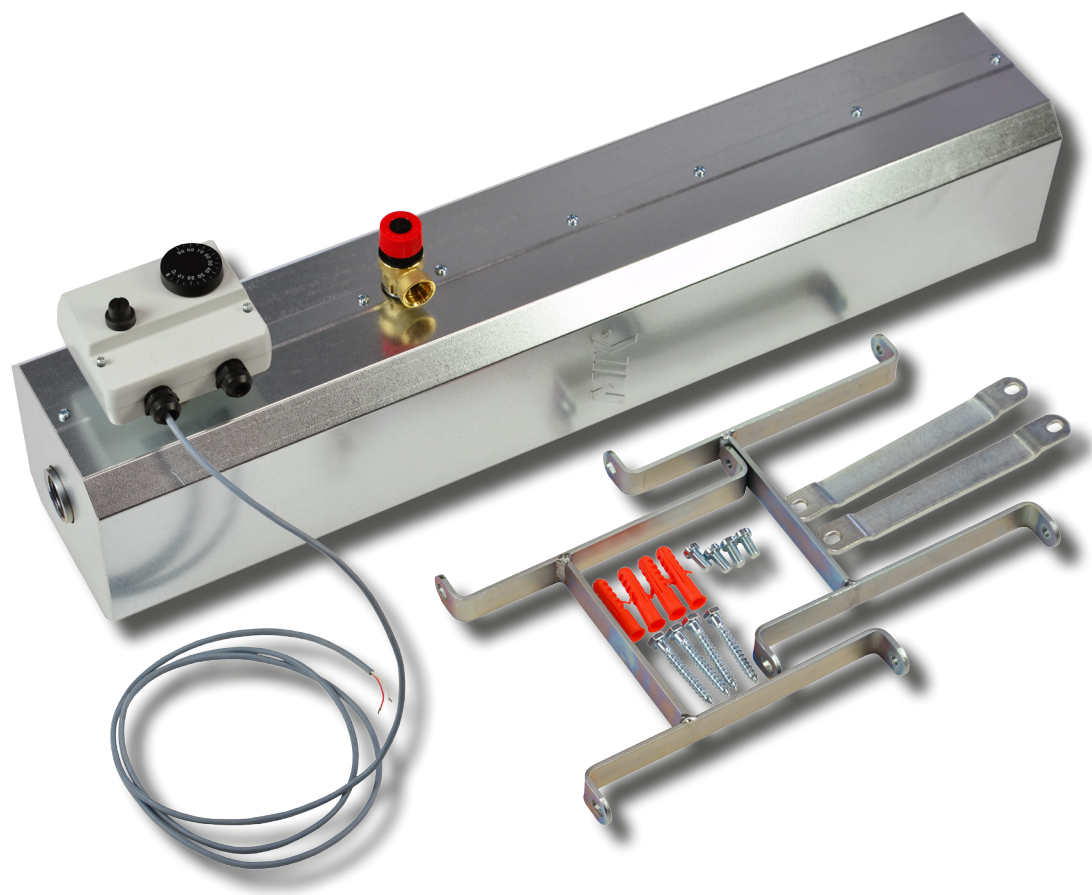




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TPO-7,5

Installation and Operation Instructions
TPO-7,5 In Line Heater

EN

TPO-7,5

1. Introduction

The in line water heater is designed for continuous heating of heating fluid by an electric heating element. It is not intended for DHW heating. The accessories involve a safety valve, encased thermostat, wall mount brackets and an adapter 1"x1/2"MF. The adjustable thermostat is knob controlled, the safety thermostat features a manual reset. The thermostat includes also a sheath and a Pt1000 sensor. An ETT-A electric heating element of output up to 7.5 kW (not included in supply) needs to be installed into the in line heater.

Main features	
Application	continuous water heating
Working fluid	water, water-glycol mixture (max. 1:1) water-glycerine mixture (max. 2:1)
Code	16 166

2. Scope of supply

1. In line heater

Technical data for TPO-7.5 in line heater	
Max. working pressure	3 bar (6 bar)*
Max. working temperature	100 °C
Storage temperature	0 to 60 °C
In/Out/Thermostat connection	3x G 1" F
ETT connection	1x G 6/4" F
Safety valve connection	1x G 1/2" F
Set weight without ETT	10.5 kg

* max. working pressure value for in line heater is 6 bar, reached by replacing the supplied safety valve with a safety valve of 6 bar opening pressure

2. Safety valve

Safety valve technical data	
Nominal pressure	PN 10
Opening pressure p_o	3 bar
Working temperature	max. 110 °C
Connection	G 1/2" M x G 1/2" F

3. Thermostat

Thermostat technical data	
Max. working temperature	90 °C
Safety thermostat	100 °C (fixed value)
Adjustable temperat. range	0 to 90 °C
Hysteresis	2 to 5 K
Contact rating	terminal C-1 (opening) - 16 (3) A / 250 V~ terminal C-2 (closing) - 6 (1) A / 250 V~
Number of cycles	100 000 (adjustable thermostat) 1 000 (safety thermostat)
IP rating	IP 40
Class	II

4. Sensor

Pt1000 sensor technical data	
Temperature measurement range	-50 to 180 °C
Temperature coefficient	3850 ppm / °C
Resistance at 0 °C	1000 Ω
Recommended measuring current	0.3 mA
Max. measuring current	2 mA
Sensor cable	2 x 0.5 mm ² , l = 2 m

5. Installation material

Wall mount brackets for in line water heater, adapter 1"x1/2"MF



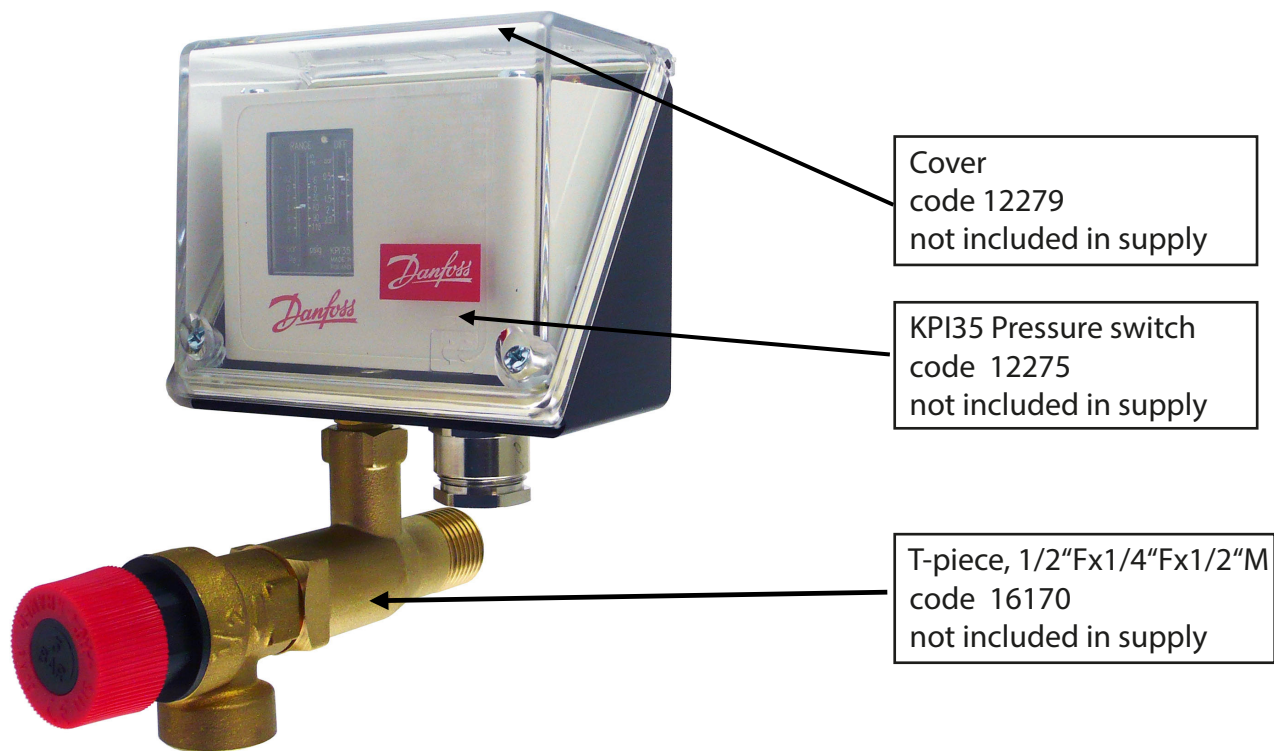
6. Optional accessories

A pressure switch can be installed into the In line heater that will switch off the heating element when the pressure sinks.

Installation

Fit a T-piece (code 16170) into the 1/2"F socket of the In line heater. Then fit a pressure switch code 12275 (cover code 12279) and a safety valve into the T-piece, see the Fig. below. Adjust the pressure switch with respect to the safety valve supplied.

Pressure switch adjustable range: -0.2 to 8 bar, difference 0.4 to 1.5 bar.



3. Installation and connection diagram

The in line water heater may be installed either in a horizontal or vertical position. For the horizontal position, a 2% inclination is recommended, so that the outlet lies higher than the inlet into the heater. When installed vertically, the heating element shall be placed in the lower section. In both these cases, the flow direction shall be respected (from inlet to outlet).

The in line water heater can be mounted on a wall using the brackets that are included in supply.

The thermostat can be installed into the in line heater either following Fig. 1 for side outlet, or following Fig. 2 for top outlet.

First fit the adapter 1"x1/2" MF into the desired thermostat position, then the thermostat sheath.

Install the safety valve into the 1/2" F tapping – see fig.. For a proper function of the safety valve, the flow direction marked on the valve body shall be respected. Tighten the valve gripping at the prepared flat spots on the valve body, not otherwise. The outlet from the safety valve shall point downwards.

The in line heater shall be thoroughly air-bled!

Connection diagram

